

ABSTRACT OF THE DISCLOSURE

A magneto-resistance effect head is provided with a lower
conductive layer which is provided with a recessed portion, and a
5 vertical bias layer is provided in the recessed portion. A free
layer is provided on the lower conductive layer. On the free
layer, layered in the following order are the non-magnetic layer,
the fixed layer, the fixing layer, and the upper layer so as not
to be placed immediately above the vertical bias layer. The non-
10 magnetic layer, the fixed layer, the fixing layer, and the upper
layer are buried in an insulation layer. Furthermore, an upper
conductive layer is provided on the upper layer and the
insulation layer. In the direction of the magnetic field applied
by the vertical bias layer, the free layer is made greater in
15 length than the fixed layer and the free layer is disposed in
proximity to the vertical bias layer with the distance between
the fixed layer and the vertical bias layer remaining unchanged.